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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,649	11/02/2001	Kevin B. Leigh	1662-40500 JMH (P00-3496)	8350
22879	7590	06/30/2005	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			CHEA, PHILIP J	
			ART UNIT	PAPER NUMBER
			2153	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/003,649

Applicant(s)

LEIGH ET AL.

Examiner

Philip J. Chea

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-18 is/are allowed.
- 6) ☒ Claim(s) 19-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This Office Action is in response to an Amendment filed April 11, 2005. Claims 1-33 are currently pending. Any rejection not set forth below has been overcome by the current Amendment.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bassman et al. further in view of Lahr (US 2002/0046405).

As per claim 19, although the system disclosed by Bassman et al. disclose

- a remote management module located near a group of servers, having a first port for exchanging server management command and data signals with a server (see Fig. 1 and column 3, lines 54-60, where remote management module is considered computer system #1 of Fig. 1) and a second port for exchanging signals with a remote server management computer over a network (see Fig. 1, and column 3, lines 38-46, where remote server management computer is considered Fig. 1 [17]), and
- a bus, coupled to the first port of the remote management unit and each coupled to each server (see Fig. 1, RS-485),

it fails to disclose a second remote management module near a group of servers, and a second bus for the second remote management module coupled to its servers.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Bassman et al., as evidenced by Lahr.

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In an analogous art, Lahr discloses that it would have been obvious to use two remote management modules located near a group of servers (see page 8, paragraph [0073], where the remote management modules are considered directors at the regional data centers).

In considering the second bus, it would have been obvious for the second remote management module to have its own bus coupled to its own set of servers.

Given the teaching of Lahr, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Bassman et al. by employing a second a remote management module, such as disclosed by Lahr, in order to manage two different server groups at two regionally different locations.

As per claim 20, Bassman further discloses a port coupled to the second port of a remote management module coupled to a network (see column 3, lines 38-42). In addition as discussed above, Lahr suggests a switch having a port coupled to each of said second ports of remote management modules (see Lahr page 8, paragraph [0073], where a director at the master data center queries directors at the regional data centers implying a switch coupled to each director).

As per claim 21, Bassman et al. in view of Lahr disclose that the network is the Internet (see Lahr page 8, paragraph [0028]).

3. Claims 22-28 rejected under 35 U.S.C. 103(a) as being unpatentable over Bassman et al. further in view of Day et al. (US 5,941,951).

As per claim 22, although the system disclosed by Bassman et al. shows

- a remote management module located near a group of servers, each remote management module having a first port for exchanging server management command and data signals with a server (see Fig. 1 and column 3, lines 54-60, where remote management module is considered computer system #1 of Fig. 1) and a second port for exchanging signals with a remote server management computer over a network (see Fig. 1, and column 3, lines 38-46, where remote server management computer is considered Fig. 1 [17]),

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- a bus coupled to the first port of said first remote management unit and coupled to each server in said group of servers (see Fig. 1, RS-485),
- whereby two servers in said group of servers may be remotely managed at essentially the same time (i.e. one remote management module can manage two servers at essentially the same time),

it fails to disclose a second remote management module and a second bus coupled to each server in said group of servers.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Bassman et al., as evidenced by Day et al.

In an analogous art, Day et al. disclose that it would have been obvious to incorporate a second remote management module (see column 6, lines 4-7, where second remote management module is considered the secondary automation system console).

In considering the second bus, it would have been obvious to connect the bus of the second remote management module to the set of servers.

Given the teaching of Day et al., a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Bassman et al. by employing a second remote management module, such as disclosed by Day et al., in order to provide a back up remote management module in case the first one fails.

As per claim 23, Bassman et al. further disclose a port coupled to a second port of remote management module and coupled to a network (see column 3, lines 38-42). In addition, as discussed above, Day et al. suggests a second port remote management module having a port coupled to the second port and coupled to a network. Furthermore, Day et al. suggests a switch coupling both first and second remote management modules (see Fig. 4 [72]).

As per claim 24, Bassman et al. in view of Day et al. further disclose that the network is the Internet (see Day et al. column 5, lines 48-65).

As per claim 25, Bassman et al. further disclose that for each server, a local management controller coupling its associated server to a bus and converting server management status and video

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data signals from its associated server to packetized signals coupled to said bus (see column 4, lines 12-43, and 64-67, where local management controller is considered the management circuit, that is located at each server). In addition, as discussed above, Day suggests a second bus to operate in the same manner.

As per claim 26, Bassman et al. further disclose

- a bus comprising a plurality of segments coupling said first port of a remote management module to each of said servers (see column 5, lines 41-47); and
- a multiplexor for each server, having three ports, two of said ports coupling bus segments in series and the third port coupled to its associated server (see column 5, lines 35-39, and column 5, lines 24-28).

In addition as discussed above, Day et al. suggests a second bus and multiplexor to operate in the same manner.

As per claim 27, Bassman et al. further disclose

- a control bus master coupled to said remote management module receiving a signal identifying a server to which the remote management module is to be connected (see column 6, lines 12-21),
- a control bus slave for each of said servers and coupled to one of said multiplexors (see column 6, lines 21-25, where the slave is considered the management circuit), and
- a control bus coupling said control bus master to each of said control bus slaves (see column 6, lines 12-25),
- each said control bus slave responding to a signal on said control bus identifying the server associated with the multiplexor to which it is coupled by signaling said multiplexor to couple signals from the server to the bus (see column 6, lines 12-39).

In addition as discussed above, Day et al. suggests a second bus master and slave to operate in the same manner as disclosed by Bassman et al.

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4. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bassman et al. in view of Day et al. as applied to claim 27 above, and further in view of LaBerge (US 5,815,674).

Although the system disclosed by Bassman et al. in view of Day et al. shows substantial features of the claimed invention (discussed above), it fails to disclose an arbitration bus.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Bassman et al. in view of Day et al., as evidenced by LaBerge.

In an analogous art, LaBerge discloses an arbitration bus (see Fig. 2 [54]).

Given the teaching of LaBerge, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Bassman et al. in view of Day et al. by employing an arbitration bus, such as disclosed by LaBerge, in order to receive two signals from separate busses.

5. Claims 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bassman et al. further in view of Kikinis (US 5,502,838).

As per claim 29, Bassman et al. disclose

- a remote management module located near a group of servers, the remote management module having a first port for exchanging server management command and data signals with a server (see Fig. 1 and column 3, lines 54-60, where remote management module is considered computer system #1 of Fig. 1), and a network port for exchanging signals with a remote server management computer (see Fig. 1, and column 3, lines 38-46, where remote server management computer is considered Fig. 1 [17]), and
- first data bus coupled to first data port of said remote management unit and to each of said servers (see Fig. 1, RS-485),
- whereby two servers in said group of servers may be remotely managed at essentially the same time (i.e. one remote management module can manage two servers at essentially the same time).

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it fails to disclose a second data port for exchanging data signals with a server, and a second data bus coupled to second data port of said remote management unit and to each of said servers.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Bassman et al., as evidenced by Kikinis

In an analogous art, Kikinis discloses a remote management of multiple processors further showing that it would have been obvious to incorporate a second data port and a second data bus for exchanging information between the remote management unit and the servers (see Fig. 5, where two data ports and two data buses are exchanging information with a remote management unit).

Given the teaching of Kikinis, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Bassman et al. by employing a second data port and a second data bus, such as disclosed by Kikinis, in order to manage additional controls (i.e. one data port and bus for managing clock rate and another data port and bus for managing voltage).

As per claim 30, Bassman et al. further disclose for each server, a local management controller having a first data port coupling its associated server to said first data bus and converting server management status and video data signals from its associated server to packetized signals coupled to said first bus (see Bassman et al. column 4, lines 12-43, and 64-67, where local management controller is considered the management circuit, that is located at each server, and rejection to claim 29). In addition as discussed above, Kikinis suggests the second data port and second data bus. Furthermore, given Kikinis's suggestion of managing additional controls as discussed above, it would have been obvious to include the second data port and data bus to manage different control lines.

As per claim 31, Bassman et al. further disclose a multiplexor for each server, each multiplexor coupling a local management controller first data port to a data bus (see column 5, lines 41-47). In addition as discussed above, Kikinis suggests a second data port and a second data bus. Furthermore, given Kikinis's suggestion of managing additional controls as discussed above, it would have been obvious to include a second multiplexor and data port to couple the local management controller to the second data bus.

As per claim 32, Bassman et al. further disclose

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- a control bus master coupled to a remote management module and having a control bus port (see column 6, lines 12-21),
- a control bus slave associated with each of the servers, and each coupled to a multiplexor associated with the same server (see column 6, lines 21-25, where the slave is considered the management circuit),
- a control bus coupled to said control bus master control bus port and coupled to each of said control bus slaves (see column 6, lines 12-25).

In addition as discussed above, Kikinis suggests a second data port and a second data bus. Furthermore, given Kikinis's suggestion of managing additional controls as discussed above, it would have been obvious to include a control bus slave coupled to a second multiplexor associated with the same server.

As per claim 33, Bassman et al. in view of Kikinis further disclose a second network port for exchanging signals with a remote server management computer (see Bassman column 4, lines 53-59).

Allowable Subject Matter

6. Claims 6-18 are allowed.

Response to Arguments

7. Applicant's arguments filed April 11, 2005 in regards to claims 19-28 have been fully considered but they are not persuasive.

- A. Applicant contends that Lahr is nonanalogous art.
- B. Applicant contends that Day is nonanalogous art, and that Bassman in view of Day does not teach a system in which two servers may be managed at essentially the same time.

8. Applicant's arguments, see pages 14 and 15, filed April 11, 2005, with respect to the rejection(s) of claim(s) 29-33 under 103(a) have been fully considered and are persuasive. Therefore, the

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rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kikinis (US 5,502,838).

9. In considering A. the Examiner respectfully disagrees. In response to applicant's argument that Lahr is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Lahr teaches remotely managing servers using, wherein two remote management modules are considered directors regionally located near a group of servers (see column [0073]). Therefore one of ordinary skill in the art would be likely to use the teaching of Lahr, to locally manage a group of servers as well as manage them from a master level by querying the regional management modules. Finally, the functionality taught by Lahr can be implemented on an environment that requires managing servers from a remote location.

10. In considering B. the Examiner respectfully disagrees. In response to applicant's argument that Day is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Day teaches remotely managing servers using a second remote management modules, herein interpreted as a second automation system console (see column 6, lines 4-7). The managing of servers is analogous because the automation system controls data delivery from the servers to clients. Therefore, the functionality taught by Day can be implemented on an environment that requires managing servers from a remote location. Further, the claim does not rely on the second remote management module to manage two servers at essentially the same time. By virtue of using a data bus taught by Bassman, it is implied that the two servers can be managed at essentially the same time.

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Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

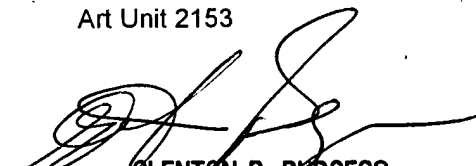
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J. Chea whose telephone number is 571-272-3951. The examiner can normally be reached on M-F 7:00-4:30 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PJC 6/21/05

Philip J Chea
Examiner
Art Unit 2153



GLENTON B. BURGESS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

